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Point Reyes National Seashore News Release

September 23, 2005 For Immediate Release John A. Dell'Osso, 415-464-5135 Jennifer Chapman, 415-464-5133

Vision Fire Anniversary Marks 10 Years of Dynamic Change

The 1995 Vision Fire was a significant event in the landscape of Point Reyes National Seashore and the wildland-urban interface of West Marin. Like the vast majority of wildland fires recorded in the history of Marin County, and the San Francisco Bay Area as a whole, the Vision Fire was human-caused. The human dimensions of the Vision Fire are compelling. Under extreme fire conditions, there was not a single major injury, no fatalities, and 422 people were safely evacuated. Property losses were substantial with 48 structures lost, yet 28 structures were also saved within the fire perimeter. Equally compelling are the ecological aspects of the fire, beginning with the weather that shaped the entire event. The fire was a catalyst for dramatic changes in flora, fauna and habitat structure, and resulted in new discoveries about the ecosystems within the Seashore and surrounding areas.

The Vision Fire was started by an illegal campfire on state park land on the east slope of Mount Vision, and burned 12,354 acres from October 3-October 16, 1995. It is not known when a fire of this size last burned on the Point Reyes Peninsula. The last major wildfire, since the Seashore was established in 1962, was the Kelham Beach fire in June of 1976, which was started by campers in the southern wilderness area, and burned 325 acres on national park land in brush and Douglas fir forest before it was fully controlled. Prior to 1976, the last major fire was in 1927, which began as a structural fire on the west slope of Mount Vision and spread to the surrounding vegetation. Most of the hundreds of unplanned wildland fires in the Seashore and vicinity during the last century have been effectively suppressed at 10 acres or less, with a large number of them suppressed at less than 1 acre.

Meanwhile, fire scars in tree rings, and charcoal in sediment cores, suggest fire may have occurred as often as once every 10 years prior to the last century within the Seashore. This fire

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history is largely attributed to the use of fire as a land management tool by the Coast Miwok, and later settlers who have occupied the Point Reyes Peninsula. Evidence of past fire history, would also account for past accidental fires, during times when fire suppression capabilities were much less sophisticated than they are today. The significance of the Vision Fire, is that it occurred under natural weather conditions which surpassed the threshold of modern human control. The Vision Fire also provided the first opportunity to study the effects of fire throughout nearly all of the habitats that occur within the Seashore.

Changes

Overall changes in the landscape include large areas of regenerating Bishop pine and coastal scrub which ten years later continue to be in immature stages of development. Much larger areas of blue blossom ceanothus and a rare species of manzanita are now present in the landscape. Numerous snags, standing dead trees, have created perches, and nests for a variety of birds, and host wood boring insects, which provide rich food sources to woodpeckers and other insect eating animals. Fallen snags have added complexity to understory habitats and stream habitats. A new alder forest has developed on alluvial fans in the Muddy Hollow watershed. These alluvial fans developed due to increased runoff and sedimentary deposits during the first few years after the fire. Mountain beavers, the species most adversely affected by the fire, are slowly recovering, as the dense coastal scrub thickets where they make their burrows regenerate.

Important Discoveries

- The rush-rose (*Helianthemum scoparium*), a plant that was previously unrecorded and of doubtful occurrence in the Seashore, germinated quickly with several species *Lotus* in the first stages of vegetation response to the fire. As it became shaded out by other species, it became scarce again.
- A new species of the moth was discovered when its larvae were found eating the seeds of the rush-rose. This species of *Mompha* was new to science and a formal name will be forthcoming.
- Monitoring in the burned area determined that Bishop pines produce cones at 5 years of age. Cone production was previously recorded to begin at 10 years of age.
- Bishop pine seedlings were found to have different species of root fungus associated with them than the mature trees, and therefore different mushrooms. The spores of these fungi had been dormant in the soil for many years.
- Three main nitrogen-fixing plants dominated the intial vegetation response to the fire-lotus, lupine, and ceanothus. The lotus and lupine have been shaded out by brush, and are now seldom found in the burned area.
- Populations of acmon blue and orange sulfur butterflies soared in association with the lotus, and have waned as the vegetation has shifted to increased shrub cover.
- The rare marin manzanita, which commingles with a more common species of manzanita, is now more abundant. The extent of the seed bank of this rare species was not known until the Vision Fire triggered the germination of dormant seeds.
- Nesting success of birds proved to be greater in the riparian areas within the burned area than in similar riparian areas outside the burned area.

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Lessons Learned

Always get a permit before making a campfire in any wildland or open space area.

Campfires are only allowed in certain areas, and are further restricted when weather conditions increase the fire danger. Land management agencies must educate the visiting public about where and when campfires are permitted.

Weather is a critical factor in determining the outcome of a fire.

The type of offshore wind event that produced suddenly intense fire behavior during the Vision Fire occurs several days each year in the San Francisco Bay Area. A similar weather event was in effect during the 1991 Oakland Fire. During the Vision Fire, wind speeds reached over 40 mph, and relative humidities dropped to as low as 6%. The winds began from the north and shifted to the east during the first 24 hours, causing the fire to make its main run toward the ocean.

Wildfire can potentially devastate both human and natural communities.

The human homes that were lost in the Vision Fire were completely consumed. The condition of the vegetation immediately surrounding structures was an important factor in the surviveability of the structures.

Northern spotted owls were not significantly impacted by the Vision Fire because they prefer south to southeast facing slopes, and the fire affected primarily west and north facing slopes. Mountain beavers were impacted in the burned area due to sudden loss of dense coastal scrub thickets which can take up to 20 years to develop. Fortunately, only 60% of their known habitat was burned in the fire. Approxoimately 98% of the population in the burned area did not survive.

Some areas are strategic for fire management.

Fireline along the Sky Trail proved critical to controlling the fire from potentially crossing Highway 1, or making a run toward Bolinas. The Seashore's recently completed fire management plans places a high priority on creating strategic fuel breaks along Limantour road, Highway 1, Inverness Ridge, Bolinas Ridge, and Palomarin along the park boundary. These strategic fuel breaks will reduce fuels in areas which will be important control lines if a wildfire occurs.

Wildland fire is a catalyst for many processes which can enhance biodiversity and benefit the ecosystem.

Mapping of the area burned determined that 10% of the fire burned at high intensity, 20% at moderate intensity, and 70% at low intensity. Within the different forest types, tree mortality was highly variable. Tree mortality in Bishop pine was 42-82%; in the Douglas fir was 28-46%; and, in the significantly moister riparian woodlands, was only 5%. The diversity in the effects of the fire has increased the mosaic of variability across the landscape. The increased variability of vegetation age and structure created by the Vision Fire enhanced biodiversity. Dormant seedbanks and sporebanks increased the populations of species which were scarce before the fire.

These benefits of fire can inform the use of prescribed fire on a much smaller scale to achieve resource management objectives within Point Reyes National Seashore. Likewise, understanding -more-

the nature of extreme weather events during fire season, can help residents and land managers manage vegetation to reduce risk and negative impacts from wildland fire.

10 Year Anniversary Events

The second of a special two part series, "Fire in the Ecosystem, Fire in the Wildland-Urban Interface", offered through the Point Reyes National Seashore Association Field Seminars program, will take place on Saturday, October 1. The upcoming seminar, Fire in the Wildland-Urban Interface, will include presentations on fire management challenges faced during the Vision Fire. A field trip to Mount Vision will revisit the firefighting decisions that were made, when a small wildfire, almost under control, suddenly became a complex incident. Additional events are planned as well.

Ongoing

Film: Spark of Life-Fire at Point Reyes

An 11-minute presentation on the Vision Fire. Includes original footage and interviews with people involved in different aspects of the fire. Shown on request at the Bear Valley Visitor Center, Point Reyes National Seashore.

Saturday, October 1, 10 am-4 pm

Field Seminar: Fire in the Wildland-Urban Interface

Point Reyes National Seashore Association Field Seminar Presentations 10 am-12 pm, Mount Vision Field Trip 1-4 pm

Registration required, call 415-663-1200. Suggested donation \$15-\$35.

Ed Mestre, Battalion Chief, Marin County Fire Department

- Firefighting Operations and Structure Protection

Keith Parker, Senior Captain, Marin County Fire Department

- Initial Attack and Defensible Space

Roger Wong, Fire Management Officer, Point Reves National Seashore

- Fire Management Policy at the Seashore

Alison Forrestel, Fire Ecologist, National Park Service, S.F. Bay Area

- Emergency Rehabilitation for Resource Protection

Sunday, October 2, 1-4 pm

Environmental Action Committee of West Marin Field Trip:

Follow-up on the Phoenix Report

Visit the neighborhoods affected by the Vision Fire with foresters who prepared the community recovery plan. Includes a 10-year update on fire ecology, vegetation management, and safety improvements. This easy 2 mile hike, led by Tom Gaman, Ray Moritz, and Carol Rice, begins at the Bayview Trailhead. RSVP to Tom Gaman, 415-669-7100. Suggested donation to EAC, \$20.

Sunday, October 2, 4-9 pm

Celebrating Rebirth - A Gathering on Inverness Ridge

Slide show, pot luck, artwork, and stories.

Hosted by photographer Richard Blair and artist Kathleen Goodwin. RSVP 415-663-1615.

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Saturday, October 8, 7-9 pm

Readings: Point Reyes Ten Years After the Vision Fire

Point Reyes Books, 11315 State Route 1, Point Reyes Station *Sponsored by Bay Nature Magazine and Point Reyes Books.*

Saturday, October 15, 2-4 pm

Discussion: Community Perspectives - Reflection on the Vision Fire

Red Barn, Bear Valley, Point Reyes National Seashore

A public dialogue on ecology, firefighting, private property, and fire safety. Guest speakers will present insights for discussion. Reception to follow.

Sarah Allen, Science Advisor, Point Reyes National Seashore Ken Massucco, Chief, Marin County Fire Department Anne Murphy, Home Ranch Ray Moritz, Fire Safe Landscaping Consultant

Additional information on the Vision Fire is available at www.nps.gov/pore/fire_visionfire.htm

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